

AMENDMENTS TO THE CLAIMS

(IN REVISED FORMAT COMPLIANT WITH THE PROPOSED

REVISION TO 37 CFR 1.121)

Please cancel claims 6 and 11 without prejudice.

1. (CURRENTLY AMENDED) An apparatus comprising:

a reference circuit comprising a reference amplifier  
configured to generate a bias signal;

a correction circuit comprising a bias correction  
5 amplifier configured to correct a bias voltage of said bias signal;  
and

an output circuit configured to generate an output  
current in response to said bias signal, wherein said bias signal  
is corrected in response to said bias voltage.

2. (ORIGINAL) The apparatus according to claim 1,  
wherein said correction circuit is configured to rapidly sink and  
source current to correct said bias signal.

3. (ORIGINAL) The apparatus according to claim 1,  
wherein said correction circuit is configured in response to a  
current enable signal.

4. (ORIGINAL) The apparatus according to claim 3, wherein said correction circuit is further configured in response to an output enable signal.

5. (ORIGINAL) The apparatus according to claim 4, wherein said output circuit is further configured in response to an output data signal.

6. (CANCEL)

7. (CURRENTLY AMENDED) The apparatus according to claim 6 1, wherein said correction circuit is further configured to sense changes to said bias voltage.

8. (ORIGINAL) The apparatus according to claim 1, wherein said correction circuit comprises:

an amplifier configured to correct said bias signal; and  
an enable circuit configured to enable said amplifier.

9. (ORIGINAL) The apparatus according to claim 1, wherein said correction circuit is further configured to provide wide-bandwidth.

10. (ORIGINAL) The apparatus according to claim 1, wherein said output circuit is further configured to generate a differential signal in response to said output current.

11. (CANCEL)

12. (ORIGINAL) A method for rapid switching of a precise current, comprising the steps of:

(A) setting a bias voltage with a first amplifier;

(B) providing said precise current in response to said  
5 bias voltage;

(C) correcting said bias voltage with a correction current from a second amplifier; and

(D) generating a differential output signal in response to said precise current.

13. (ORIGINAL) The method according to claim 12, wherein step (C) further comprises:

sampling said bias voltage.

14. (ORIGINAL) The method according to claim 13, wherein step (C) further comprises:

enabling said second amplifier based on said bias voltage.

15. (ORIGINAL) The method according to claim 12,  
wherein step (C) further comprises:

sensing changes in said bias voltage.

16. (ORIGINAL) The method according to claim 12,  
wherein step (C) further comprises:

disabling said second amplifier after said bias voltage  
is corrected.

17. (ORIGINAL) The method according to claim 12,  
wherein step (C) further comprises:

isolating wideband bandwidth to said second amplifier.

18. (ORIGINAL) The method according to claim 12,  
wherein step (D) further comprises:

turning on and off said precise current in response to  
one or more control signals.

19. (ORIGINAL) The method according to claim 12,  
wherein step (D) further comprises:

reducing overall power consumption.

20. (ORIGINAL) The method according to claim 12,  
wherein step (D) further comprises:

turning on and off said precise current during non-transmit times.

21. (NEW) An apparatus for rapid switching of a precise current, comprising:

means for setting a bias voltage with a first amplifier;

means for providing said precise current in response to  
5 said bias voltage;

means for correcting said bias voltage with a correction current from a second amplifier; and

means for generating a differential output signal in response to said precise current.

22. (RE-PRESENTED - FORMERLY DEPENDENT CLAIM 8) An apparatus comprising:

a reference circuit configured to generate a bias signal;

a correction circuit comprising (i) an amplifier  
5 configured to correct a bias voltage of said bias signal and (ii) an enable circuit configured to enable said amplifier; and

an output circuit configured to generate an output current in response to said bias signal, wherein said bias signal is corrected in response to said bias voltage.